

Materials List for:

Adenoviral Gene Therapy for Diabetic Keratopathy: Effects on Wound Healing and Stem Cell Marker Expression in Human Organ-cultured Corneas and Limbal Epithelial Cells

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Materials

Name	Company	Catalog Number	Comments
minimum essential medium	Thermo Fisher Scientific	11095-080	
Optisol-GS	Bausch & Lomb	50006-OPT	
ABAM antibiotic-antimycotic mixture	Thermo Fisher Scientific	15240062	
calf skin collagen	Sigma-Aldrich	C9791	
agar, tissue culture grade	Sigma-Aldrich	A1296	
n-heptanol	Sigma-Aldrich	72954-5ML-F	
O.C.T. compound	VWR International	25608-930	
Dispase II	Roche Applied Science	4942078001	
keratinocyte serum-free medium (KSFM)	Thermo Fisher Scientific	17005042	
EpiLife medium with calcium	Thermo Fisher Scientific	MEPI500CA	
N2 medium supplement, 100x	Thermo Fisher Scientific	17502-048	
B27 medium supplement, 50x	Thermo Fisher Scientific	17504-044	
human keratinocyte growth supplement, 100x	Thermo Fisher Scientific	S-001-5	
trypsin 0.25% - EDTA 0.02% with phenol red	Thermo Fisher Scientific	25200056	
trypsin 0.25% with phenol red	Thermo Fisher Scientific	15050065	
soybean trypsin inhibitor	Sigma-Aldrich	T6414	
fetal bovine serum	Thermo Fisher Scientific	26140079	
insulin-transferrin-selenite supplement (ITS)	Sigma-Aldrich	I3146-5ML	
antibody to keratin 14	Santa Cruz Biotechnology	sc-53253	
antibody to keratin 15	Santa Cruz Biotechnology	sc-47697	
antibody to keratin 17	Santa Cruz Biotechnology	SC-58726	
antibody to ΔNp63α	Santa Cruz Biotechnology	sc-8609	
antibody to PAX6	BioLegend	PRB-278P-100	
antibody to nidogen-1	R&D Systems	MAB2570	
antibody to integrin α3β1	EMD Millipore	MAB1992	
human fibronectin	BD Biosciences	354008	
human laminin	Sigma-Aldrich	L4445	
human type IV collagen	Sigma-Aldrich	C6745-1ML	

adenovirus expressing MMP-10 shRNA	Capital BioSciences	custom made	
adenovirus expressing cathepsin F shRNA	Capital BioSciences	custom made	
adenovirus expressing scrambled shRNA and GFP	Capital BioSciences	custom made	
adenovirus expressing c-met	OriGene (plasmid)	SC323278	
adenovirus expressing GFP	KeraFAST	FVQ002	
sildenafil citrate, 25 mg	Pfizer	from pharmacy	
epidermal growth factor	Thermo Fisher Scientific	PHG0311	
poly-L-lysine	Sigma-Aldrich	P4707	
polybrene	Sigma-Aldrich	107689-10G	
ViraDuctin	Cell Biolabs	AD-200	
ibiBoost	ibidi, Germany	50301	
phosphate buffered saline (PBS)	Thermo Fisher Scientific	10010049	
Corning round end spatula	Dow Corning	3005	
60 mm Petri dishes	Thermo Fisher Scientific	174888	
Nunc Lab-Tek II multiwell chamber slides	Sigma-Aldrich	C6807	
200 µl pipet tips	Bioexpress	P-1233-200	other suppliers available
inverted microscope	Nikon	Diaphot	other suppliers/models available
humidified CO ₂ incubator	Thermo Fisher Scientific	370 (Steri-Cycle)	other suppliers/models available
fluorescent microscope	Olympus, Japan	BX-40	other suppliers/models available
dissecting stereo microscope	Leica, Germany	S4 E	other suppliers/models available